Welcome to Océ… Welcome to WOW!

Wow is… security. With the rising incidence of fraud, identity theft, and counterfeiting, it is critical to protect all kinds of documents against unauthorized reproduction or misuse. This need extends beyond checks to include applications like event tickets, passports, ID badges, prescription pads, high-value coupons, cross-border documents, birth certificates, school transcripts, stocks, bonds, and money orders. Today’s technologies puts print service providers in a position to protect clients against fraud.

Kris Albee: Director of Product Marketing for Océ Continuous Feed Production Devices

drupa, held once every four years in Düsseldorf, Germany, is the world’s largest print show. While drupa 2008 was referred to as “the inkjet drupa,” drupa 2012 was the “inkjet drupa on steroids.” No other technology received more attention than inkjet during drupa 2012, and Océ was in the thick of new inkjet announcements at the event.

Every aspect of inkjet – speed, quality, and format – saw significant leaps in performance. The requisite characteristics of inkjet now enable digital production to displace offset for a large number of applications. Inkjet and digital printing are beginning to aggressively displace analog offset printing of books, direct mail, brochures, newspapers, catalogs, and magazines.

Kris Albee, Director of Product Marketing for Océ Continuous Feed Production devices, works closely with her company’s research and development teams as new technologies emerge. Albee explains, “My team has the responsibility to work with other marketing functions and R&D to identify business opportunities for our customers that our end-to-end solutions can address. We collaborate with marketing, advertising, sales, and technical services teams to coordinate product launches and quickly respond to customer inquiries and requirements. We also communicate with engineers on product release schedules and best practices for implementation and we work with sales to create marketing materials, support customer events, and deliver solutions that meet our clients’ needs.”
Kris Albee: Director of Product Marketing for Océ Continuous Feed Production Devices (continued)

Albee’s team has a clear set of priorities:

**Successfully launch new product suites in the U.S. market:**
Albee notes, “This is an exciting time to be at Océ. With our new product introductions, we have the largest continuous feed portfolio in the industry. We are introducing new models of the Océ ColorStream and Océ JetStream®, as well as a revolutionary new technology called Océ InfiniStream™. This web-fed electrophotographic liquid toner device will initially be targeted at the packaging market, but it creates tremendous opportunities for all market segments. Getting these products successfully launched in the U.S. is of paramount importance.”

**Help customers capitalize on the high-speed inkjet opportunity:** With all of the new developments in inkjet, Albee realizes that Océ’s success is directly aligned with its customers’ success. She elaborates, “The explosion in digital color means that we need to work with users to capitalize on the opportunity profitably. We are working with them on solutions that leverage ‘white paper in, color out’ to eliminate preprinted forms by streamlining production, enabling postal savings, and ultimately offering additional value to clients. Additionally, we are streamlining workflow and finishing options to cost-effectively produce ‘books of one.’ Applications will be limited only by imagination.”

**Introduce solutions that drive operational excellence:**
Albee points out that organizations need to deliver more than products. “When we introduce a new product, our emphasis is on efficiently meeting our customers’ needs and expectations while also delivering solutions. This includes sales, administration, service, and technology and software support.”

**Support the successful installation and integration of new products:** “Every customer is different, especially with high-speed inkjet applications,” Albee states. “This is why we back our products with professional services. We ensure that our products map to our customers’ specific environments. Given our focus on automation and driving a ‘touchless workflow,’ we focus on maximizing efficiency around print production.”

**Build solid and ongoing customer relationships:** “The relationship with our customer is at the center of everything,” Albee notes. “It’s the core of the Océ culture. Sales, marketing, technical service, project management, and service personnel work to see everything from our customer’s perspective. We understand that it is in our best interest to help our customers maximize their productivity and profitability.”

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**Top Ten Fastest-Growing Applications by Absolute Digital Print Volume Gain (U.S.)**

<table>
<thead>
<tr>
<th>Application</th>
<th>2015 Volume Gain</th>
<th>2010 Volume Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>+45.8 bn pages</td>
<td>+16.2 bn pages</td>
</tr>
<tr>
<td>Direct Mail</td>
<td>+14.1 bn pages</td>
<td></td>
</tr>
<tr>
<td>Brochures</td>
<td></td>
<td>+8.0 bn pages</td>
</tr>
<tr>
<td>Newspapers/Newsletters</td>
<td>+6.3 bn pages</td>
<td></td>
</tr>
<tr>
<td>Magazines</td>
<td>+4.6 bn pages</td>
<td></td>
</tr>
<tr>
<td>TransPromo</td>
<td>+4.2 bn pages</td>
<td></td>
</tr>
<tr>
<td>Inserts, Coupons</td>
<td>+3.0 bn pages</td>
<td></td>
</tr>
<tr>
<td>Posters, Banners, Signage</td>
<td>+2.6 bn pages</td>
<td></td>
</tr>
<tr>
<td>Labels</td>
<td>+2.1 bn pages</td>
<td></td>
</tr>
</tbody>
</table>

Secure Printing: Help Take a Bite Out of Crime

With the rising incidence of fraud, identity theft, and counterfeiting, it is critical to protect all kinds of documents against unauthorized reproduction or misuse. This need extends beyond checks to include applications like event tickets, passports, ID badges, prescription pads, high-value coupons, cross-border documents, birth certificates, school transcripts, stocks, bonds, and money orders.

During 2010, 5% of revenues were lost to fraud. According to the Association of Certified Fraud Examiners, the money lost to fraud amounts to $725 billion in the United States – this equates to over $2,200 for every man, woman, and child in America!

Server firewalls and other security barriers usually protect company data until it reaches the printing process, but the document is then subject to attack. There are four basic causes for a breach of document security:

- **Counterfeiting/mimicking** occurs when documents attempt to represent an original item with falsified information, whether it is a passport, a license, or even a color copy of currency
- **Theft**
- **Alteration**, which includes the addition, removal, or change to the original information
- **False issuance**, which involves issuing a legitimate document under false pretenses

Leveraging today’s technologies puts print service providers in a position to protect clients against fraud. This represents a huge opportunity for generating new revenue by incorporating more security into the documents being printed. It is applicable for printers of all types, including transactional printers, commercial printers, direct mailers, forms printers, and in-plants.

**Savvy Service Providers are Taking a Number of Measures to Ensure the Security of Documents:**

- **Counterfeiting**: A number of print techniques are being deployed that enable the reviewer to ascertain the legitimacy of the document. Examples include:
  - Digital “ Void” pantograph
  - “Halo” covert authenticable security feature
  - Prismatic design color printing
  - Micro-printing of signature lines or document borders
  - UV visible print: either static or variable data, barcodes, etc.
  - Disappearing screen pattern border (disappears when copied)
  - Variable data micro printing or variable data to match account numbers
  - “Laid lines” (uneven lines that flow throughout the document and fill in when copied or scanned)

- **Theft**: Service providers are working with clients to closely control access to secure documents and employ tools that quickly identify if and when a theft has occurred. A common procedure is to use control numbers to uniquely identify each individual item. Monitoring procedures are used to provide alerts if a document turns up as missing. Security labels and seals also provide an alert when a box is opened.

- **Alteration**: Criminals have been changing information on documents for decades. Service providers need to look for technologies to complicate the removal of original information ranging from chemical stains that reveal attempts at washing and erasable backgrounds that reveal attempts at ink and toner removal.

- **Preventing false issuance**: Service providers handling sensitive documents focus on entirely different levels of security. Facilities may have controlled access, surveillance systems, and regular or random audits.

Producing sensitive documents demands the highest levels of quality and security. Océ has a number of secure printing solutions that will enable you and your organization to produce on-demand checks and sensitive negotiable documents securely, safely, and efficiently – all with complete variability, confidence, and a low cost of operation.

**Visit OcéProductionPrinting.com/CorporateEnterprise**

To learn more about how Océ customers are leveraging technology to deliver a secure solution, tune into our free on-demand webinar entitled: **When Security Counts**.
Content Critical, LLC (Carlstadt, NJ) is a leading provider of mission critical business communications and services. It provides unique custom solutions for transaction processing that incorporate content management, compliance messaging, and reporting solutions, such as composition and rendering solutions for institutions that require distribution of compliance documents. The company also provides its blue chip Fortune 500 client base professional services, such as programming and development, web development, graphic design, and prepress; production services, including digital print, wide format output, mailing and fulfillment, commercial print, and binding and finishing; and online support and client services.

According to Content Critical Chief Technology Officer, John Slaney, “Producing sensitive transaction documents demands the highest levels of security for our customer base. One of the most critical secure documents we produce is checks. We deal with both logical and physical secure processing techniques.”

Slaney highlights the critical measures associated with managing the entire check process. Content Critical provides its customer base with secure data processing platforms. Network servers are monitored via a security management information system. A centralized appliance base firewall system is in place, along with intrusion detection and protection, anti-spam and anti-virus tools. Data is subject to secure file transfer methods and encrypted when at rest and upon processing completion “wiped clean” from data storage devices.

Physical security to protect against false issuance of checks is built into the facilities at Content Critical. There are restricted access zones accessible only with card access; surveillance cameras at key access points; and alarms for fire, smoke, and unauthorized access.

From a document production perspective, Slaney says, “The check production process starts with data validation. We receive encrypted data files and a companion control file. The number of records, total payments amounts received, check payment date, and beginning and ending check numbers are validated. From there we generate check images and post them on a secure website. Based on permissions, users can review documents online. Email notifications are sent to specified users that images are ready for viewing. The document validation process provides the ability to suppress individual documents and to approve or reject the entire set. All images have a “VOID” watermark through check and routing numbers. Upon approval images are processed for print, presorted for USPS postal presort, and queued to a secure server for print.”

Once data is validated, files are spooled to an Océ VarioPrint® 6160 MICR monochrome production cut-sheet printer. Check stock is pulled from a secure storage zone. The checks have pre-numbered individual control numbers. They are printed and scanned for MICR density and readability throughout the run. Printed checks are loaded in locked cages and moved to a secure staging area. All unused check stock is validated and recorded. Checks destroyed during the imaging process are recorded, stamped void, and maintained in a destruction log in the secure zone until a client review audit and are then shredded.

The next phase is completing the check packages. They are moved to a secure staging area in mail operations, intelligently inserted, and check package batches are reconciled. Any packages that are destroyed are captured, voided, and regenerated. They are moved back to a secure zone until funding authorization is received and then checks are moved into the USPS mail stream.

“With the increased incidence of fraud, identity theft, and counterfeiting, it is more important than ever to protect our customers’ documents against unauthorized reproduction and misuse. A process with extensive security check points and validation processes and flawless execution is what customers have come to expect from Content Critical.”

— John Slaney
Chief Technology Officer, Content Critical
Securing Documents: MICR Technology from Océ

Highly sensitive negotiable documents like checks or money orders demand extra safety and protection against forging. Magnetic Ink Character Recognition (MICR) technology was developed as a security measure to authenticate documents and allow for rapid processing. MICR technology (which prints a unique style of numbers and symbols in a special font with magnetically chargeable toner) was initiated by the American Bank Association and later adopted as ANSI X9.27 “E13-B” standard by the American National Standard Institute (ANSI). MICR is still in use today for all check clearing operations.

MICR printing is available as an option for the Océ VarioPrint® 5000 and Océ VarioPrint 6000 cutsheet printers, as well as the Océ JetStream, Océ ColorStream, Océ VarioStream® 7000, and Océ VarioStream 8000 continuous feed printers.

Cutsheet MICR Solutions
The Océ VarioPrint 6160 Ultra, Ultra TP, and MICR offer one of the most productive digital perfecting systems in their class. The Océ VarioPrint 6000 Ultra family combines all the attributes needed for a total MICR/standard solution. Patented Océ Copy Press technology and the Océ Gemini print engine make quality extremely stable. In addition to productivity, quality, reliability, and secure MICR printing on one platform, the Océ VarioPrint 6000 Ultra family offers:

- Near-offset quality
- Scalable performance at 160, 190, and 234 duplex prints per minute
- Monthly duty cycles of up to 7.5 million prints
- Reliability

The Océ VarioPrint 6000 Ultra family combines all the attributes needed for a total MICR/standard solution!

Security Features Protect Transaction Documents
The new Océ MICR systems meet customer demands for security, accuracy, and quality. Device features, such as micro-font printing, assure no information is lost and no checks are double-printed. An optional camera-based verification system manages the integrity and reprinting of MICR documents without impacting speed or productivity. Checks are processed through high-speed, highly accurate readers/sorters, while near-perfect registration ensures precise check printing. Océ Paper Logic® ensures media is properly loaded to match desired output, minimizing errors and reprints.

Océ VarioPrint 6000 MICR systems use paper, toner, and energy economically; provide a low level of energy consumption; and occupy a smaller footprint than configurations combining multiple systems to print both traditional and MICR output.
MICR on a Roll: The Océ JetStream family

The Océ JetStream family was the first to integrate MICR functionality into a full-color production inkjet engine that supports both high-volume color inkjet printing and MICR applications on a single platform. The Océ JetStream family provides full CMYK production integrated with MICR on a single platform. This offers the ability for full-color TransPromo applications requiring MICR, check production, as well as color transaction documents. The integrated MICR capability eliminates base stock production costs. For check writing applications such as EOBs, payroll, payables, and disbursements, Océ JetStream MICR printing eliminates preprinted forms and their associated security concerns.

Other breakthroughs in the production of digital checks from a blank roll include:

- Integration of selective perfing equipment
- Ability to use a 20# bond or 50# offset sheet
- Digital pantographs
- Micro printing
- Drop out inks

Customers indicate that the MICR signal strength readability level of characters has far exceeded CPSA (Check Payment Systems Association) specifications. In an environment where every dollar counts, the investment in high-speed inkjet with MICR pays off from both a quality and productivity perspective. High-speed inkjet in production environments can create a bottom line ROI for businesses and their customers. Benefits include:

- A reduction in postal costs by consolidating jobs into a single run, thereby increasing the number of mail pieces that qualify for the maximum postal discounts
- A reduction in the storage and management of multiple paper stocks and selective inserts
- The elimination of separate direct mail pieces to existing customers (replacement with full page, dynamic in-statement promotions)

Océ continues to take MICR printing to the next level by offering versatile and flexible MICR solutions in a wide range of speeds and capabilities. These unique solutions unite the power of MICR and conventional monochrome and color printing in one production-class printing system to address the needs of commercial and transactional printers of all sizes.

Visit OceProductionPrinting.com/CorporateEnterprise

For more information on securing documents with MICR technology download the brochure: Océ MICR Printing.

The Océ JetStream family provides full CMYK production integrated with MICR on a single platform!
Océ is a global market leader in the 10M+ color duty cycle. The company’s drupa 2012 announcements, featuring ongoing product enhancements, are a strong indication that it will maintain that position. With its latest announcements, Océ is providing technology users with a unique range of ink types, speeds, web widths, process directions, and monochrome/color devices.

New product highlights cut across the entire product line, including Océ’s 16 inkjet presses within the Océ JetStream and Océ ColorStream families, Océ PRISMA® workflow software, finishing, and new technologies. Let’s explore what’s new!

**Océ JetStream**

The Océ JetStream Compact series includes full-color inkjet digital printing systems with single cabinet, full-width duplex printing. Its compact design makes the Océ JetStream Compact series the ideal entry solution to the Océ JetStream product family and to high-volume digital full-color printing, bringing Océ JetStream technology to users with monthly print volumes between 4 million and 55 million letter impressions.

The Océ JetStream Dual series is comprised of the Océ JetStream 1500, Océ JetStream 2200, and Océ JetStream 3000, available in speed classes of 328, 492, and 656 feet per minute (fpm) respectively. The Océ JetStream Dual series offers customers a smooth and seamless growth path from 1,428 to 2,860 letter pages per minute, considerably shortening production windows as customers strive to reduce SLAs.

The Océ JetStream Wide series features six digital full-color inkjet systems for 30” web printing. The Océ JetStream 2800, Océ JetStream 3300, and Océ JetStream 4300 systems expand the Océ JetStream family’s range of applications, bringing more power to newspaper and book printing. With a speed of up to 656 fpm and an actual print width of 29.5”, the Océ JetStream 4300 supports the production of up to 4,295 letter impressions per minute.

Within the recently announced Océ JetStream mono series, the Océ JetStream 4300 mono is optimized for monochrome-only book production with its reduced footprint; it is not upgradeable to color. It has perceived quality of 1,200 dpi and can run at speeds of 656 fpm or 4,295 letter-sized impressions per minute. This press is focused on driving up the break-even point when transitioning from offset to digital production. Océ recognizes the importance of finishing and is leveraging its partnership with Manroland to benefit end-user book and newspaper printers.

**Océ ColorStream**

Drupa was the stage for the introduction of three new models in the Océ ColorStream product line. These products feature new Piezo inkjet head technology that improves performance by more than 30%. The entry-level configuration is the Océ ColorStream 3200, running at 157 fpm or 687 letter-sized impressions per minute. It is field upgradeable for those wanting to start with a monochrome configuration and migrate to full-color. The Océ ColorStream 3700 runs at 328 fpm or 1,428 letter-sized impressions per minute; it has a duty cycle of 46 million letter impressions per month. The newly announced Océ ColorStream 3900 now produces 417 fpm full-color images or 1,818 letter-sized impressions per minute.

Océ currently offers dye and pigment inks for its Océ JetStream product line and will offer this same capability for its Océ ColorStream line. This means that users have the flexibility to choose the right ink for their operation’s cost, color, durability, and quality requirements. Océ continues to offer its industry-leading MICR solutions and highlight colors across its inkjet portfolio.
Emerging Technologies

At drupa 2012, Océ demonstrated a new print technology that could have a large impact on the packaging market. The Océ InfiniStream is a web-fed Electrophotographic liquid toner device that is designed to rival offset in quality, productivity, and substrate versatility. Projections are that it will run up to 14,000 B2 sheets per hour or 7,200 B1 sheets per hour. It will produce extremely high quality output, as it features a lithographic ink process and offset-like media ranges. While initially targeted at the packaging market, its projected quality and speed levels open an entire range of applications for the commercial print market.

Enhanced Workflow with Océ PRISMAproduction Server V4.06

Océ PRISMAproduction® Server V4.06 incorporates major enhancements and new functionality. All of these enhancements focus on making Océ PRISMAproduction drive profitable workflow for customers.

While there is a list of improvements with existing capabilities, there are three brand new options available with Océ PRISMAproduction Server V4.06:

- **Dashboard** – This option provides a “one glance” overview on the systems utilization by providing charts and statistics from multiple data sources.
- **Pre-Printed forms replacement for cutsheet devices** – This option enables the customer to use plain white paper instead of pre-printed paper for applications, without having to make any changes to the application. The option is available for AFP, PDF, PS, TIFF, and LCDS data streams.
- **Graphical floor plan** – provides an easy overview on current status of the entire print floor.